

370	375	380
Ile Lys Met Glu Glu Ala Gly Asp Glu Ile Val Ser Asn Ala Ile Ser		
385	390	395
Tyr Ala Leu Tyr Lys Ala Phe Ser Thr Ser Glu Gln Asp Lys Asp Asn		
	405	410
Trp Asn Gly Gln Leu Lys Leu Leu Leu Glu Trp Asn Gln Leu Asp Leu		
	420	425
Ala Asn Asp Glu Ile Phe Thr Asn Asp Arg Arg Trp Glu Ser Ala Asp		
	435	440
Leu Gln Glu Val Met Phe Thr Ala Leu Ile Lys Asp Arg Pro Lys Phe		
	450	455
Val Arg Leu Phe Leu Glu Asn Gly Leu Asn Leu Arg Lys Phe Leu Thr		
	465	470
His Asp Val Leu Thr Glu Leu Phe Ser Asn His Phe Ser Thr Leu Val		
	485	490
Tyr Arg Asn Leu Gln Ile Ala Lys Asn Ser Tyr Asn Asp Ala Leu Leu		
	500	505
Thr Phe Val Trp Lys Leu Val Ala Asn Phe Arg Arg Gly Phe Arg Lys		
	515	520
Glu Asp Arg Asn Gly Arg Asp Glu Met Asp Ile Glu Leu His Asp Val		
	530	535
Ser Pro Ile Thr Arg His Pro Leu Gln Ala Leu Phe Ile Trp Ala Ile		
	545	550
Leu Gln Asn Lys Lys Glu Leu Ser Lys Val Ile Trp Glu Gln Thr Arg		
	565	570
Gly Cys Thr Leu Ala Ala Leu Gly Ala Ser Lys Leu Leu Lys Thr Leu		
	580	585
Ala Lys Val Lys Asn Asp Ile Asn Ala Ala Gly Glu Ser Glu Glu Leu		
	595	600
Ala Asn Glu Tyr Glu Thr Arg Ala Val Glu Leu Phe Thr Glu Cys Tyr		
	610	615
Ser Ser Asp Glu Asp Leu Ala Glu Gln Leu Leu Val Tyr Ser Cys Glu		
	625	630
Ala Trp Gly Gly Leu Glu His His His His His His		
	645	650

&lt;210&gt; 676

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 676

```

Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe
1      5      10      15
Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile Arg Ser
20      25      30
Gly Gly Gly Ser Pro Thr Val His Ile Gly Pro Thr Ala Phe Leu Gly
35      40      45
Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val Gln Arg Val
50      55      60
Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr Gly Asp Val
65      70      75      80
Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr Ala Met Ala
85      90      95
Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser Val Asn Trp
100     105     110
Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr Leu Ala Glu
115     120     125
Gly Pro Pro Ala
130

```

&lt;210&gt; 677

&lt;211&gt; 36

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 677

```

ggggaattca tgatccggga gaaatttgcc cactgc
36

```

&lt;210&gt; 678

&lt;211&gt; 33

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 678

```

gggctcagat caggagttag agaccagcct ggc
33

```

&lt;210&gt; 679

&lt;211&gt; 675

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 679

```

atgcacacc atcaccatca cagggccgog tcggataact tccagctgtc ccagggtagg 66
caggattcc cattccgat cgggcaggcg atggcgatcg cgggccagat caagcttccc 126

```

```

accgttcata  tggggcctac  cgccttcctc  ggcttgggtg  ttgtgcacaa  caaaggcaac  180
ggcgacacgag  tccaacgcgt  ggtcggggag  gctcggcgcg  caagtctcgg  catctccacc  240
ggcgacacgta  tcacgcgggt  cgcggcgctc  ccgatcaact  cggccacccg  gatggcgagc  300
ggccttaacg  ggcacatcat  ccgtgacgtc  atctcgggtg  cctggcaaac  caagtggggc  360
ggcagcgatga  cagggaacgt  gacattggcc  gagggaccoc  cggccgaatt  catgatccgg  420
gagaaatttg  cccactgcac  cgtgctaacc  attgcacaca  gattgaacac  cattattgac  480
agcgacaaga  taatgggttt  agattcagga  agactgaang  aatatgatga  gccgtatggt  540
ttgctgcaca  ataaagagag  cctattttac  aagatgtgtc  aacaaactgg  caaggcgaga  600
gcgcctgcoc  tcactgaaac  agcaaaacag  agatgggggt  tcaccatggt  ggccaggctg  660
gtctcaact  cctga  675

```

&lt;210&gt; 680

&lt;211&gt; 291

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 680

```

atggggatcc  gggggaatt  tggccactgc  accgtgctaa  coattgcaca  cagattgaac  60
accattattg  acagcgacaa  gataatgggt  ttgattccga  gaagactgaa  agaatatgat  120
gagccgtatg  ttttgggtga  aataaagag  agcattttt  acaagatggt  gcaacaactg  180
ggcaaggcag  aagccgtgc  cctcaactga  acagcaaac  agagatgggg  ttcccatg  240
ttggccaggc  tgggtcaca  ctccctcgag  caccaccacc  accaccaactg  a  291

```

&lt;210&gt; 681

&lt;211&gt; 1074

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 681

```

atgtaccca  ttgagaggg  gtacagggca  atcgtcagca  tccgaagaat  ccagaccttt  60
ttgtactctg  atgagatatz  acagcgcaac  cgtcagctgc  cgtcagatgg  taaaagatg  120
gtgcattgtc  aggattttac  tgctttttgg  gataaggcat  cagagaaccc  aactctacaa  180
ggcctttcct  ttactgtcag  accctggcgaa  ttgttagctg  tggtcggccc  cgtgggagca  240
gggaagtcat  cactgttaag  tgcctgtctc  ggggaattgg  ccccaagtc  cgggcttgct  300
agcgtgcagt  gaagaattgc  ctatgtgtct  cagcagccct  ggggtgtctc  gggaactctg  360
aggaagtaata  ttttatttgg  gaagaaatac  gaaaaggaa  gatatgaaaa  agtcataaag  420
ccttctgtct  tgaaaaggga  ttacagctg  ttggaggatg  gtgatctgag  tgtgatagga  480
gatcggggaa  ccccgctgag  tggagggcag  aaagcaacgg  taacccttgc  aagagcagtg  540
tatcaagatg  ctgacatcta  tctcctggac  gatcctctca  gtgcagttag  tgcggaagt  600
agcagacact  tgttgaact  gtgtatttgt  caaattttg  atgagaagat  cacatttta  660
gtgactcact  agttgcagta  cctcaaaagt  gcaagtcaag  ttctgatatt  gaaagatggt  720
aaaatggtgc  agaaggggac  ttacactgag  ttctaaaaat  ctggatagag  ttttggctcc  780
ctttaaaga  aggataatga  ggaaggtgaa  caacctccag  ttccaggaac  tcccaacct  840
aggaatcgt  cctctcaga  gtcttcggt  tggctcacc  aatcttcag  accctcctt  900
aaagatggtg  ctctgggaag  ccaagataca  gagaatgtcc  cagttacact  agtcaggagg  960
aacctgtctg  aaggaaaagt  tgggttttgc  gctataaga  attacttcag  acgtgtgtct  1020
cactggatgt  tcttcatttt  ccttattctc  gacacacc  cccacaccca  ctga  1074

```

&lt;210&gt; 682

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 682

Met His His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu

5

10

15

Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala

20	25	30
Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala 35 40 45		
Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val 50 55 60		
Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr 65 70 75 80		
Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr 85 90 95		
Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser 100 105 110		
Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr 115 120 125		
Leu Ala Glu Gly Pro Pro Ala Glu Phe Met Ile Arg Glu Lys Phe Ala 130 135 140		
His Cys Thr Val Leu Thr Ile Ala His Arg Leu Asn Thr Ile Ile Asp 145 150 155 160		
Ser Asp Lys Ile Met Val Leu Asp Ser Gly Arg Leu Lys Glu Tyr Asp 165 170 175		
Glu Pro Tyr Val Leu Leu Gln Asn Lys Glu Ser Leu Phe Tyr Lys Met 180 185 190		
Val Gln Gln Leu Gly Lys Ala Glu Ala Ala Ala Leu Thr Gln Thr Ala 195 200 205		
Lys Gln Arg Trp Gly Phe Thr Met Leu Ala Arg Leu Val Ser Asn Ser 210 215 220		
<210> 683		
<211> 357		
<212> PRT		
<213> Homo sapiens		
<490> 683		
Met Ser Ala Ile Gln Arg Val Ser Glu Ala Ile Val Ser Ile Arg Arg 5 10 15		
Ile Gln Thr Phe Leu Leu Leu Asp Glu Ile Ser Gln Arg Asn Arg Gln 20 25 30		
Leu Pro Ser Asp Gly Lys Lys Met Val His Val Gln Asp Phe Thr Ala 35 40 45		
Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr Leu Gln Gly Leu Ser Phe		

50	55	60
Thr Val Arg Pro Gly Glu Leu Leu Ala Val Val Gly Pro Val Gly Ala		
65	70	75 80
Gly Lys Ser Ser Leu Leu Ser Ala Val Leu Gly Glu Leu Ala Pro Ser		
	85	90 95
His Gly Leu Val Ser Val His Gly Arg Ile Ala Tyr Val Ser Gln Gln		
	100	105 110
Pro Trp Val Phe Ser Gly Thr Leu Arg Ser Asn Ile Leu Phe Gly Lys		
	115	120 125
Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val Ile Lys Ala Cys Ala Leu		
	130	135 140
Lys Lys Asp Leu Gln Leu Leu Glu Asp Gly Asp Leu Thr Val Ile Gly		
	145	150 155 160
Asp Arg Gly Thr Thr Leu Ser Gly Gly Gln Lys Ala Arg Val Asn Leu		
	165	170 175
Ala Arg Ala Val Tyr Gln Asp Ala Asp Ile Tyr Leu Leu Asp Asp Pro		
	180	185 190
Leu Ser Ala Val Asp Ala Glu Val Ser Arg His Leu Phe Glu Leu Cys		
	195	200 205
Ile Cys Gln Ile Leu His Glu Lys Ile Thr Ile Leu Val Thr His Gln		
	210	215 220
Leu Gln Tyr Leu Lys Ala Ala Ser Gln Ile Leu Ile Leu Lys Asp Gly		
	225	230 235 240
Lys Met Val Gln Lys Gly Thr Tyr Thr Glu Phe Leu Lys Ser Gly Ile		
	245	250 255
Asp Phe Gly Ser Leu Leu Lys Lys Asp Asn Glu Glu Ser Glu Gln Pro		
	260	265 270
Pro Val Pro Gly Thr Pro Thr Leu Arg Asn Arg Thr Phe Ser Glu Ser		
	275	280 285
Ser Val Trp Ser Gln Gln Ser Ser Arg Pro Ser Leu Lys Asp Gly Ala		
	290	295 300
Leu Glu Ser Gln Asp Thr Glu Asn Val Pro Val Thr Leu Ser Glu Glu		
	305	310 315 320
Asn Arg Ser Glu Gly Lys Val Gly Phe Gln Ala Tyr Lys Asn Tyr Phe		
	325	330 335
Arg Ala Gly Ala His Trp Ile Val Phe Ile Phe Leu Ile Leu Glu His		
	340	345 350
His His His His His		
	355	

<210> 684

<211> 96

&lt;212&gt; PRT

<213> Homo sapiens

<490> 664

Met Gly Ile Arg Glu Lys Phe Ala His Cys Thr Val Leu Thr Ile Ala  
5 10 15

His Arg Leu Asn Thr Ile Ile Asp Ser Asp Lys Ile Met Val Leu Asp  
20 25 30

Ser Gly Arg Leu Lys Glu Tyr Asp Glu Pro Tyr Val Leu Leu Gln Asn  
35 40 45

Lys Glu Ser Leu Phe Tyr Lys Met Val Gln Gln Leu Gly Lys Ala Glu  
50 55 60

Ala Ala Ala Leu Thr Glu Thr Ala Lys Glu Arg Trp Gly Phe Thr Met  
65 70 75 80

Leu Ala Arg Leu Val Ser Asn Ser Leu Glu His His His His His His  
85 . 90 95

<210> 685

<211> 35

52125 D888

<213> Artificial Sequence

&lt;220&gt;

<223> PCR primer

&lt;400&gt; 685

ccccatggg gctcggggag caatttggcc actgc 35

&lt;210&gt; 686

<211> 35

<212> DNA

&lt;213&gt; Artificial Sequence

<220>

<223> PCR primer

&lt;400&gt; 68€

eggeceggg gaetttoaga ccagootogg caaca 35

&lt;210&gt; 687




&lt;212&gt; DNA

<213> Artificial Sequence

&lt;220&gt;

<223> PCR primer

<400> 687  
gcctggacca tatgtacgcc attgagaggg tgtcagag 38

<210> 688  
<211> 34  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> PCR primer

<400> 688  
ccgctcgaga ataaaggaaa tgaagacaat ccag 34

<210> 689  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> PCR primer

<400> 689  
gttgattca tgcacgggac ccaggtg 27

<210> 690  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> PCR primer

<400> 690  
cccctgagtg cactatgggc tgccctcttga 30

<210> 691  
<211> 915  
<212> DNA  
<213> Homo sapiens

<400> 691  
atgcataacc atcaccatca caccggccggg tccgtaact tccagctgtc ccagggtggg 60  
cagggtattcg ccattccgat cgggcaggcg atggogatcg cgggccaagt caagcttccc 120  
accgttcata tcgggcctac cgcttccctc ggattgggtg ttgtcgaca caacggcaac 180  
ggcgacagag tccaacgggt ggtcgggagc gctccggcgg caagtctcgg catctccacc 240  
ggcgacgtga tcaccgggt cgacggcgct ccgataact cggccaccgc gatggcggac 300  
ggccttaaac ggcatcatcc cggtgacgtc atctcgggtg cctggcacaac caagtggggc 360  
ggcagcgcta cagggaacgt gacattggcc gagggaacccc cggcgaatt catgcacggg 420  
ccccegggtgc tggcacgctg ctccgagtg gcttgctctg ccttggtcgc caccctctgg 480  
gggtggcgtc tggagggggt ggaacggcca ccaaccttac ccagtcaagg aagtggatgg 540  
ccatgtccc acagcctgag tggctgccac ctgatggctg atggagcaaa ggccttagga 600  
aaagcatagt gcccttggcc ctaccttttt gttagaagaa ctgatgttcc atgtcctgca 660  
gcgagtcagg ttggtggctg tgcccccagc tccctggcgc cctcgcaga ggtgactggt 720

tgtctctttgg	gacctctttgg	cattgcccagg	catgcacaagg	cctcaggtgct	actactgtg	780
tacaaatctgga	gcacatctagg	ggaacacgagc	agccactctca	ggagcaagggt	gtatgctgct	840
tttgggggct	cagctccttg	cctcaagggt	attatgtcac	tgtgggctc	tigggttga	900
aagacagac	cctg					915

&lt;210&gt; 692

<211> 304

<Z12> PRT

<213> Homo sapiens

&lt;400&gt; 692

Met His His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu  
5 10 15

Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala  
20 25 30

Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala  
35 40 45

Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val  
50 55 60

Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr  
65 70 75 80

Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr  
85 90 95

Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser  
100 105 110

Val	Thr	Trp	Gln	Thr	Lys	Ser	Gly	Gly	Thr	Arg	Thr	Gly	Asn	Val	Thr
		115					120					125			

Leu Ala Glu Gly Pro Pro Ala Glu Phe Met His Gly Pro Gln Val Leu  
130 135 140

Ala Arg Cys Ser Glu Cys Ala Cys Pro Ala Leu Ala Ala Thr Ser Ala  
145 150 155 160

Gly Val Arg Leu Glu Gly Val Asp Arg Pro Pro Thr Leu Pro Ser Gln  
165 170 175

Gly Ser Gly Trp Pro Cys Ser His Ser Leu Ser Gly Cys His Leu Met  
180 185 190

Ala Asp Gly Ala Lys Ala Leu Gly Lys Ala Asp Gly Pro Trp Pro Tyr  
195 200 205

Leu Phe Val Arg Arg Thr Asp Val Pro Cys Pro Ala Ala Ser Glu Val  
210 215 220

Gly Gly Cys Ala Pro Ser Ser Trp Arg Ala Leu Ala Glu Val Thr Gly  
225 230 235 240

Cys Ser Leu Gly Pro Leu Gly Leu Ala Gln His Ala Gln Ala Ser Val  
245 250 255



Leu Leu Leu Cys Tyr Lys Trp Ser His Ile Gly Glu Thr Ser Ser His  
260 265 270

Leu Arg Ser Lys Val Tyr Ala Ala Phe Gly Gly Ser Ser Pro Cys Leu  
275 280 285

Lys Gly Leu Met Ser Leu Trp Ala Ser Trp Leu Ser Arg Gly Arg Pro  
290 295 300

<210> 693

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 693

cgaagtcacg tggaggccag cctc

24

<210> 694

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 694

cctgacogaa ttcattaact ggootggac

29

<210> 695

<211> 166

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> (1)...(166)

<223> Xaa = Any Amino Acid

<400> 695

Met Gly His His His His His Val Glu Ala Ser Leu Ser Val Arg  
1 5 10 15  
His Pro Glu Tyr Asn Arg Pro Leu Leu Ala Asn Asp Leu Met Leu Ile  
20 25 30  
Lys Leu Asp Glu Ser Val Ser Glu Ser Asp Thr Ile Arg Ser Ile Ser  
35 40 45  
Ile Ala Ser Gln Cys Pro Thr Ala Gly Asn Ser Cys Leu Val Ser Gly  
50 55 60  
Trp Gly Leu Leu Ala Asn Gly Arg Met Pro Thr Val Leu Gln Cys Val  
65 70 75 80  
Asn Val Ser Val Val Ser Glu Glu Val Cys Ser Lys Leu Tyr Asp Pro

	85		90		95
Leu Tyr His Pro Ser Met Phe Cys Ala Gly Gly Gly Gln Xaa Gln Xaa					
100			105		110
Asp Ser Cys Asn Gly Asp Ser Gly Gly Pro Leu Ile Cys Asn Gly Tyr					
115		120		125	
Leu Gln Gly Leu Val Ser Phe Gly Lys Ala Pro Cys Gly Gln Val Gly					
130		135		140	
Val Pro Gly Val Tyr Thr Asn Leu Cys Lys Phe Thr Glu Trp Ile Glu					
145		150		155	160
Lys Thr Val Gln Ala Ser					
165					

&lt;210&gt; 696

&lt;211&gt; 504

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (1)...(504)

&lt;223&gt; n = A,T,C or G

&lt;400&gt; 696

atggggccatc atcatcatca tcaactggag gccagcctct ccgtacggca cccagagtac	60
aacagaccct tgcctcgtaa ccaccccatg atcatcaagt tggacgaatc cgtgtccggg	120
tctgacacaa tccggagcat cagcattgct tgcagtgcc ctaccggggg gaactcttgc	180
ctcgtttctg gctggggtct gctggcgaa cgcagaatgc ctacccgtct gcagtgctgc	240
aaagtgtcgg tgggtgtctg ggaggtctgc agtaagctct atgaccgcgt gtaccacccc	300
agcatgttct gccccggcgg agggcaanac cagaangact cctgcacagg tgactctggg	360
gggccccgta tctgcacagg gtacttgcaq ggccctgtgt ctttcggaaa agccccgtgt	420
ggccaaagtg gogtgccagg tgtctacacc aacctctgca aattcactga gtggatagag	480
aaaaccgtcc aggcacgtta atga	504

&lt;210&gt; 697

&lt;211&gt; 21

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 697

ctcaggggttc cggagccggg g	21
--------------------------	----

&lt;210&gt; 698

&lt;211&gt; 35

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 698

ctatagaatt cattaccaaa aagctggggt ccagc	35
--	----

&lt;210&gt; 699

<211> 241  
 <212> PRT  
 <213> Homo sapiens

<400> 699

```
Met Gln His His His His His Leu Arg Val Pro Glu Pro Arg Pro
 1           5           10           15
Gly Glu Ala Lys Ala Glu Gly Ala Ala Pro Pro Thr Pro Ser Lys Pro
 20           25           30
Leu Thr Ser Phe Leu Ile Gln Asp Ile Leu Arg Asp Gly Ala Gln Arg
 35           40           45
Gln Gly Gly Arg Thr Ser Ser Gln Arg Gln Arg Asp Pro Glu Pro Glu
 50           55           60
Pro Glu Pro Glu Pro Glu Gly Gly Arg Ser Arg Ala Gly Ala Gln Asn
 65           70           75           80
Asp Gln Leu Ser Thr Gly Pro Arg Ala Ala Pro Glu Glu Ala Glu Thr
 85           90           95
Leu Ala Glu Thr Glu Pro Glu Arg His Leu Gly Ser Tyr Leu Leu Asp
100          105          110
Ser Glu Asn Thr Ser Gly Ala Leu Pro Arg Leu Pro Gln Thr Pro Lys
115          120          125
Gln Pro Gln Lys Arg Ser Arg Ala Ala Phe Ser His Thr Gln Val Ile
130          135          140
Glu Leu Glu Arg Lys Phe Ser His Gln Lys Tyr Leu Ser Ala Pro Glu
145          150          155          160
Arg Ala His Leu Ala Lys Asn Leu Lys Leu Thr Glu Thr Gln Val Lys
165          170          175
Ile Trp Phe Gln Asn Arg Arg Tyr Lys Thr Lys Arg Lys Gln Leu Ser
180          185          190
Ser Glu Leu Gly Asp Leu Glu Lys His Ser Ser Leu Pro Ala Leu Lys
195          200          205
Glu Glu Ala Phe Ser Arg Ala Ser Leu Val Ser Val Tyr Asn Ser Tyr
210          215          220
Pro Tyr Tyr Pro Tyr Leu Tyr Cys Val Gly Ser Trp Ser Pro Ala Phe
225          230          235          240
Trp
```

<210> 700  
 <211> 729  
 <212> DNA  
 <213> Homo sapiens

<400> 700

```
atgcagcacc accaccatca ccaacctcagg gtcccgagac cgggcccggg ggagggcgaaa 60
gcgagagggg ccggcgccgc gaccccgctc aagcccgctca cgtccttctc catccaggac 120
atctgcgggg acggcgcgca cgggcaaggc ggccgcacga gcagccagag acagcgcgac 180
ccggagccgg agccagagcc agagccagag ggaggagcca gcccgcgggg ggccgagaa 240
gacagctgga gcaacgggccc ccggcgccgg ccggatgagg ccgagacgct gccagagacc 300
gagccagaaa ggcacttggg gtcttatctg ttgactctg aaaaacattc agggccnctt 360
ccaaggttcc cccaaacccc taagcagcgg cagaagcgct ccagagctgc ctctccccc 420
actcaggtga toagattgga gaggaagtcc agccatcsga agtacctgtc gccacctgaa 480
cgggccaccg tggccaagaa cctcaagctc acggagaccc aagtgaagat atggttccag 540
aacagactgt ataagactaa gcgaagcag ctctctctgg agctggggaga ctggagagag 600
cactcttttt tgcgggcctt gaaagaggag gccttctccc ggccctcctt ggtctccgtg 660
tataaagctt ctcttacta cccatacctg cactgcctgg gcagctggag cccagctttt 720
tggtaatga 729
```

<210> 701  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 701  
 ctactaagcg ctggagtgag ggcacg

27

<210> 702  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 702  
 catcgagaat tcactactct ctgactagat gtc

33

<210> 703  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

<400> 703  
 Met Gln His His His His His Ala Gly Val Arg Asp Gln Gly Gln  
 1 5 10 15  
 Gly Ala Arg Trp Pro His Thr Gly Lys Arg Gly Pro Leu Leu Gln Gly  
 20 25 30  
 Leu Thr Trp Ala Thr Gly Gly His Cys Phe Ser Ser Glu Gln Ser Gly  
 35 40 45  
 Ala Val Asp Gly Ala Gly Gln Lys Lys Asp Arg Ala Trp Leu Arg Cys  
 50 55 60  
 Pro Glu Ala Val Ala Gly Phe Pro Leu Gly Ser Asp Cys Arg Glu Gly  
 65 70 75 80  
 Gly Arg Gln Gly Cys Gly Gly Ser Asp Asp Glu Asp Asp Leu Gly Val  
 85 90 95  
 Ala Pro Gly Leu Ala Pro Ala Trp Ala Leu Thr Gln Pro Pro Ser Gln  
 100 105 110  
 Ser Pro Gly Pro Gln Ser Leu Pro Ser Thr Pro Ser Ser Ile Trp Pro  
 115 120 125  
 Gln Trp Val Ile Leu Ile Thr Glu Leu Thr Ile Pro Ser Pro Ala His  
 130 135 140  
 Gly Pro Pro Trp Leu Pro Asn Ala Leu Glu Arg Gly His Leu Val Arg  
 145 150 155 160  
 Glu

<210> 704  
 <211> 489  
 <212> DNA  
 <213> Homo sapiens

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<400> 704
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tgcttttccot ctgaggagtc aggagctgtg gatggtgctg gacagaagaa ggcagagggcc      180
tgctcaggt gtccagagggc tgctcctggc ttcccttttg gatcagactg cagggagggga      240
ggcgcgaggg gttgtggggg gagtgaagat gaggatgacc tgggggtggc tccagggcctt      300
gcccttgctt gggccctcac ccagcctccc tcacagtctc ctggccctca gtctctcccc      360
tcacatccat cctccatctg gcctcagtg gtcattctga tcactgaact gaccataccc      420
agccctgcc caggccctcc atggctcccc aatgccctgg agaggggaca tctagtccga      480
gagtagtga
489

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<210> 705
<211> 132
<212> PRT
<213> Homo sapiens

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<400> 705
Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe
  1             5             10             15
Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile Arg Ser
      20             25             30
Gly Gly Gly Ser Pro Thr Val His Ile Gly Pro Thr Ala Phe Leu Gly
      35             40             45
Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val Gln Arg Val
      50             55             60
Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr Gly Asp Val
      65             70             75             80
Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr Ala Met Ala
      85             90             95
Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser Val Asn Trp
      100            105            110
Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr Leu Ala Gln
      115            120            125
Gly Pro Pro Ala
130

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<210> 706
<211> 31
<212> DNA
<213> Artificial Sequence

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<220>
<223> PCR primer

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<400> 706
ggggattcca tcacctatgt gccgcctctg c

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31

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<210> 707
<211> 40
<212> DNA
<213> Artificial Sequence

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<220>
<223> PCR primer

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<400> 707  
gggetcgagt cactcgccna cgaatccgt gtaaacacgc

40

<210> 708  
<211> 1203  
<212> DNA  
<213> Homo sapiens

<400> 708  
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cagggtatcg ccattccgat cgggcaggcg atggcgatcg cgggocagat caagcttccc 120  
accgttcata tggggccctac cgccttccct ggctgggtg ttgtcgacaa caacggcaac 180  
ggcgccagag tccaacgggt ggtcggggag gctcggcgcg caagtctcgg catctccacc 240  
ggcgacgtga tcaacgggtt cgaaggcggt ccgatcact cggcaccgcg gatggcggac 300  
ggccttaacg ggcattatcc cggtagctc atctcggtag cctggcacc caagtcgggg 360  
ggcaccgcta cagggaacgt gacattggcc gagggaaccc cggcgaatt catcacctat 420  
gtcccgctc tgcctctgga agtgggggta gaggagaagt tcatgacct ggtgctgggc 480  
attggtccag tgcctgggct ggtctgtgtc cagctcctag gctcaccag taccactgg 540  
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tga 1203

<210> 709  
<211> 400  
<212> PRT  
<213> Homo sapiens

<400> 709  
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Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala  
20 25 30  
Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala  
35 40 45  
Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val  
50 55 60  
Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr  
65 70 75 80  
Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr  
85 90 95  
Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser



<210> 710  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 710  
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Ser Val Arg Val  
                   20

<210> 711  
 <211> 60  
 <212> DNA  
 <213> Homo sapiens

<400> 711  
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<210> 712  
 <211> 10  
 <212> PRT  
 <213> Homo sapiens

<400> 712  
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                           5                          10

<210> 713  
 <211> 30  
 <212> DNA  
 <213> Homo sapiens

<400> 713  
 gcccttgcct gtgatgtctc cgtacgtgtg 30

<210> 714  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 714  
 Ala Ser Ala Cys Asp Val Ser Val Arg  
   1                          5

<210> 715  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 715  
 Ser Ala Cys Asp Val Ser Val Arg Val  
                           5

<210> 716  
 <211> 27



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 716

tctgactgtg atgtctccgt acgtgtg

27

&lt;210&gt; 717

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 717

Gly Ile Gly Pro Val Leu Gly Leu Val Cys Val Pro Leu Leu Gly Ser

5

10

15

Ala Ser Asp

&lt;210&gt; 718

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 718

Val Pro Pro Leu Leu Leu Glu Val Gly Val Glu Glu Lys Phe Met Thr

5

10

15

Met Val Leu

&lt;210&gt; 719

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 719

Met Val Glu Arg Leu Trp Val Ser Arg Leu Leu Arg His Arg Lys Ala

5

10

15

Gln Leu Leu

&lt;210&gt; 720

&lt;211&gt; 57

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; {1}...{57}

&lt;223&gt; n = A,T,C or G

&lt;400&gt; 720

gggathggnc cagtnytnng nythgtntgy gtnccnytny tnggnwngc nwgngay

57

<210> 721  
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<212> DNA  
<213> Homo sapiens  
  
<220>  
<221> misc\_feature  
<222> (1)...(57)  
<223> n = A,T,C or G  
  
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<210> 722  
<211> 57  
<212> DNA  
<213> Homo sapiens  
  
<220>  
<221> misc\_feature  
<222> (1)...(57)  
<223> n = A,T,C or G  
  
<400> 722  
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<210> 723  
<211> 9  
<212> PRT  
<213> Homo sapiens  
  
<400> 723  
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<210> 724  
<211> 9  
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<213> Homo sapiens  
  
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1 5  
  
<210> 725  
<211> 9  
<212> PRT  
<213> Homo sapiens  
  
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<210> 726  
<211> 9  
<212> PRT

<213> Homo sapiens

<400> 726

Met Leu Ile Lys Leu Asp Glu Ser Val

1 5

<210> 727

<211> 9

<212> PRT

<213> Homo sapiens

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<210> 728

<211> 10

<212> PRT

<213> Homo sapiens

<400> 728

Leu Leu Ala Asn Gly Arg Met Pro Thr Val

1 5 10

<210> 729

<211> 10

<212> PRT

<213> Homo sapiens

<400> 729

Leu Met Leu Ile Lys Leu Asp Glu Ser Val

1 5 10

<210> 730

<211> 10

<212> PRT

<213> Homo sapiens

<400> 730

Val Leu Gln Cys Val Asn Val Ser Val Val

1 5 10

<210> 731

<211> 10

<212> PRT

<213> Homo sapiens

<400> 731

Gly Leu Leu Ala Asn Gly Arg Met Pro Thr

1 5 10

<210> 732

<211> 10

<212> PRT

<213> Homo sapiens

<400> 732

Thr Val Leu Gln Cys Val Asn Val Ser Val

1 5 10  
 <210> 733  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 733  
 Gly Val Leu Val His Pro Gln Trp Val  
 1 5

<210> 734  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 734  
 Val Leu Val His Pro Gln Trp Val Leu  
 1 5

<210> 735  
 <211> 1195  
 <212> DNA  
 <213> Homo sapiens

<400> 735  
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 ggagaaattt agaggaagac gattatttgc ataggacac ggagagagac agcatgctaa 180  
 aaagacotgt gottttgcat ttgcaccaaa cagcccatgc tgatgaattt gactgcctt 240  
 cagaacttca gcacacacag gaactcttcc cactgtggca ctggccaat aaaatagctg 300  
 ctattatagc atctctgact ttcttttaca ctcttctgag ggaagtaatt caccottttag 360  
 caacttccca tcaacaatct ttctataaaa ttccaatctt ggtcatcaac aaagtcttgc 420  
 caatggtttc catcactctc ttggcatttg ttacotgccc aggtgtgata gcagcaattg 480  
 tccaacttca taatggaaac aagtataaga agtttccaca ttggttgat aagtggatgt 540  
 taacaaagaa gcaatttggg ctctcgaagt tcttttttgc tgtactgcac gcaatttata 600  
 gtctgtctta cccaatgagg cgatcctaca gatacaagtt gctaaaactgg gcatatcaac 660  
 aggtcccaaca aaataaaagaa gatgcctgga ttgagcatga tgtttggaga atggagattt 720  
 atgtgtctct ggaatttgtt ggaattggaa tactggctct gttggctgtg acatctatto 780  
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 ttgtttccct gatattttaa agcatactat tctggccatg ctggaggagag aagatactga 1020  
 agattagaca tggttgggaa gacgtcacca aatttaacaa aactgagata tgttccagtt 1080  
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<210> 736  
 <211> 339  
 <212> PRT  
 <213> Homo sapiens

<400> 736  
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 3 10 15

Lys Pro Arg Arg Asn Leu Glu Glu Asp Asp Tyr Leu His Lys Asp Thr  
 20 25 30  
 Gly Glu Thr Ser Met Leu Lys Arg Pro Val Leu Leu His Leu His Gln  
 35 40 45  
 Thr Ala His Ala Asp Glu Phe Asp Cys Pro Ser Glu Leu Gln His Thr  
 50 55 60  
 Gln Glu Leu Phe Pro Gln Trp His Leu Pro Ile Lys Ile Ala Ala Ile  
 65 70 75 80  
 Ile Ala Ser Leu Thr Phe Leu Tyr Thr Leu Leu Arg Glu Val Ile His  
 85 90 95  
 Pro Leu Ala Thr Ser His Gln Gln Tyr Phe Tyr Lys Ile Pro Ile Leu  
 100 105 110  
 Val Ile Asn Lys Val Leu Pro Met Val Ser Ile Thr Leu Leu Ala Leu  
 115 120 125  
 Val Tyr Leu Pro Gly Val Ile Ala Ala Ile Val Gln Leu His Asn Gly  
 130 135 140  
 Thr Lys Tyr Lys Lys Phe Pro His Trp Leu Asp Lys Trp Met Leu Thr  
 145 150 155 160  
 Arg Lys Gln Phe Gly Leu Leu Ser Phe Phe Phe Ala Val Leu His Ala  
 165 170 175  
 Ile Tyr Ser Leu Ser Tyr Pro Met Arg Arg Ser Tyr Arg Tyr Lys Leu  
 180 185 190  
 Leu Asn Trp Ala Tyr Gln Gln Val Gln Gln Asn Lys Glu Asp Ala Trp  
 195 200 205  
 Ile Glu His Asp Val Trp Arg Met Glu Ile Tyr Val Ser Leu Gly Ile  
 210 215 220  
 Val Gly Leu Ala Ile Leu Ala Leu Leu Ala Val Thr Ser Ile Pro Ser  
 225 230 235 240  
 Val Ser Asp Ser Leu Thr Trp Arg Glu Phe His Tyr Ile Gln Ser Lys  
 245 250 255  
 Leu Gly Ile Val Ser Leu Leu Leu Gly Thr Ile His Ala Leu Ile Phe  
 260 265 270  
 Ala Trp Asn Lys Trp Ile Asp Ile Lys Gln Phe Val Trp Tyr Thr Pro  
 275 280 285  
 Pro Thr Phe Met Ile Ala Val Phe Leu Pro Ile Val Val Leu Ile Phe  
 290 295 300  
 Lys Ser Ile Leu Phe Leu Pro Cys Leu Arg Lys Lys Ile Leu Lys Ile  
 305 310 315 320  
 Arg His Gly Trp Glu Asp Val Thr Lys Ile Asn Lys Thr Glu Ile Cys

325

330

335

Ser Gln Leu

<210> 737  
<211> 2172  
<212> DNA  
<213> Homo sapiens

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<400> 737
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ccatttttagt actatgggtg aqlacatgga attgagctt ggottaaatc ttccagaagt 180
tatatatota ttttatttta tttttttgag acagagcttc gctgtgtcac ccaggctgga 240
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ccgctgtcct cccaagtgc tgggattaca ggatgagtc accgcacaca gctgggactg 480
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aggaaactta caatctgtgt ggaaggcgaa ggggaagcaa ggcactctt acatggtgc 600
aggagaaac gagtgaaggg ggaactgac acaaaacttt ttttttgag scaagagct 660
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<210> 738  
<211> 2455  
<212> DNA  
<213> Homo sapiens

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<400> 738
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ttattgcttt tgggtgcaaat gccgtggctt catctgagga attctagaat tcagaggggtg 180  
 tagccctccca ctctgctgtc ttgcttatctg ctctcaattgc atccgttttaa cctgcaattct 240  
 gaaagatggtt tctcagggtt ttccctgagc attttctctt ttcttgatcc tgacaattgtt 300  
 ttaaatcatt gtactgtggt tatcatttct ctgcttttat tttaaccatc ttccctgtga 360  
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 gattttttct caaatctctt hgtgaattcc agagaggggc aggcacgggtg ggcacacatt 480  
 ctaattcccg caacttgggg aggttgagac ggggtgatca cttaggttca ggaatttgag 540  
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 agatcattgt gctgcaactcc agctctggtca acagagcaag actctgcttc aaaaaaaaac 780  
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 aatggacttg ctcaaatgtg gaggcaggca gahccttcc aggggtatct ggagccctgt 1860  
 ttccagttgc tttctlaatt ctctcttata gtttacctca aaactctctt gaggtctcgc 1920  
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 gctgtgagca cccagcaaaag tgcctcagtaa atgcacagta attgatttga cctctgaaca 2100  
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 cttctcaaga gctaagaagg ttgtctgagt attctggcat gatgtttggt gatcaaaaa 2400  
 ctgctggcca aaaaatgatga gtatttcccc ctcttctga agaatgtctc caaac 2455

&lt;210&gt; 739

&lt;211&gt; 2455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 739

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 aggggtgaggc actggtttgt actcctggga atcaggaggt acaccagaat ttattttctg 120  
 ttattgtctt tgttgcgaat cgcgtggctt catctgagga attctagaat tcagaggggt 180  
 tagccctccca ctctgctgtc ttgcttatctg ctctcaattgc atccgttttaa cctgcaattct 240  
 gaaagatggtt tctcagggtt ttccctgagc attttctctt ttcttgatcc tgacaattgtt 300  
 ttaaatcatt gtactgtggt tatcatttct ctgcttttat tttaaccatc ttccctgtga 360  
 actgttctta ttgtctttta attttcgctt gtcttttatg gctttccaact tcttaaatat 420  
 cattgtttct caaatctctt tgtgaattcc agagaggggc aggcacgggtg ggcacacatt 480  
 gtaattccag caacttgggg aggttgagac ggggtgatca cttaggttca ggaatttgag 540  
 accagctggt ccaacatggt gaaatcccggt ttcactaaaa atacaaaaat taccacggca 600  
 tgggtggcgg cgctgtaat cccaggttact cgggagggctg agggaggaga attcgttga 660  
 cctgggaggg tgaggggagga gaatcgctty aacccggggg gcagaggttgc cagtgaacog 720





Arg Glu Arg Val Arg Gly Glu Thr Ala Thr Asn Phe Phe Phe Leu Arg  
                   20                                  25                                  30  
 Gln Glu Ser Gly Pro Val Ala Gln Ala Gly Val Gln Trp His Asp Leu  
                   35                                  40                                  45  
 Ser Ser Leu Gln Pro Leu Pro His Arg Phe Lys Gln Phe Ser Cys Leu  
                   50                                  55                                  60  
 Ser Leu Pro His Ser Trp Asp His Arg Tyr Ala Pro Pro His Leu Ala  
                   65                                  70                                  75                                  80  
 Asn Phe Cys Ser Phe Ser Arg Asp Gly Val Ser Leu Cys Cys Ser Gly  
                   85                                  90                                  95  
 Trp Ser Lys Thr Pro Gly Leu Gln Gln Ser Ala Cys Leu Gly Leu Pro  
                   100                                  105                                  110  
 Lys Cys Trp Gly Tyr Arg His Lys Pro Pro His Pro Ala Cys His Ile  
                   115                                  120                                  125  
 Leu Leu Asn Tyr Gln Val Ser  
                   130                                  135

&lt;210&gt; 742

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 742

Met His Tyr His Lys Asn Ser Met Gly Lys Ile Pro Pro Ile Ile Gln  
                                   5                                  10                                  15  
 Ser Pro Pro Thr Arg Ser Pro Pro Thr Arg Gly Ile Gly Trp Gly His  
                                   20                                  25                                  30  
 Arg Ala Lys Pro Tyr Gln Met Leu Gln Gly Leu Gly Thr Leu Arg Pro  
                                   35                                  40                                  45  
 Leu Arg Pro Gly Val Ser Val Thr Leu Leu Gly Ser Val Cys Leu Gln  
                                   50                                  55                                  60  
 Asp Leu Pro Pro Leu Pro Trp Tyr Arg Arg Lys Val Leu  
                                   65                                  70                                  75

&lt;210&gt; 743

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 743

Met Leu Val His Ile Tyr Ser Cys Cys Gly Met Val Tyr Arg Phe Gly  
                                   5                                  10                                  15  
 Gln Met Ser Asp Asn Pro Phe Tyr Ile Leu Ala Ser Leu Gly Ser Ser  
                                   20                                  25                                  30

Ser Cys Arg Asn Gly Leu Ala Ser Lys Trp Arg Gln Ala Asp Pro Ser  
35 40 45

Asp Gly Tyr Met Glu Pro Cys Phe Gln Leu Leu Phe  
50 55 60

<210> 744

<211> 76

<212> PRT

<213> Homo sapiens

<400> 744

Met Cys Leu Cys Ile Pro Leu Gly Gly Tyr Gln Gln Leu Cys His Cys  
5 10 15

Met Ser Thr Ser Asp Gly Phe Ala Pro Pro Gln Leu Gly Ser Arg  
20 25 30

Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro  
35 40 45

Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly  
50 55 60

Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys  
65 70 75

<210> 745

<211> 76

<212> PRT

<213> Homo sapiens

<400> 745

Met Val Lys Ser Arg Phe Thr Lys Asn Thr Lys Ile Thr Gln Ala Trp  
5 10 15

Trp Arg Ala Pro Val Ile Pro Gly Thr Arg Gln Ala Glu Gly Gly Gln  
20 25 30

Ser Leu Glu Pro Gly Arg Leu Arg Gln Glu Asn Arg Leu Asn Pro Gly  
35 40 45

Gly Arg Gly Cys Ser Glu Pro Arg Ser Cys Cys Cys Thr Pro Ala Trp  
50 55 60

Ser Thr Glu Gln Asp Ser Ala Ser Lys Thr Asn Lys  
65 70 75

<210> 746

<211> 80

<212> PRT

<213> Homo sapiens

<400> 746

Met Leu Leu His Ser Ser Leu Val Asn Arg Ala Arg Leu Cys Leu Lys

5					10					15					
Asn	Lys	Gln	Ile	Asn	Lys	Gln	Thr	Asn	Lys	Thr	Gln	Arg	Phe	Cys	Cys
20				25				30							
Asn	Val	Gln	Gly	Ala	Ile	Cys	Ser	Phe	Lys	Lys	Ile	Ile	Phe	Gly	Gln
35				40				45							
Ala	Gln	Trp	Leu	Thr	Pro	Val	Ile	Pro	Ala	Leu	Trp	Glu	Ala	Lys	Val
50				55				60							
Gly	Gly	Ser	Phe	Glu	Val	Arg	Ser	Leu	Arg	Ser	Ala	Trp	Pro	Thr	Trp
65				70				75				80			

<210> 747

&lt;211&gt; 72

4222 FBI

&lt;213&gt; Homo sapiens

<400> 747

```
Met His Tyr His Lys Asn Ser Met Gly Lys Ile Pro Pro His Asn Pro  
          5                      10                     15
```

---

```
Ile Thr Ser      His Gln Val Ser Ser Asp Thr Trp Asp Trp Val Gly Thr  
         20                25                 30
```

---

```
Gln Ser Gln Thr Val Ser Asp Ala Ala Gly Ala Gly Asp Thr Glc Thr  
        35              40             45
```

---

```
Thr Gln Thr Trp Cys Leu Cys His Ser Ser' Gly Leu Cys Leu Ser Pro  
       50            55           60
```

---

```
Gly Pro Pro Ser Pro Ser Met Val  
   65               70
```

&lt;210&gt; 748

4212 77

&lt;212&gt; PRST

<213> Homo sapiens

&lt;400&gt; 748

```

Met His Tyr His Lys Asn Ser Met Gly Lys Ile Pro Pro Ile Ile Gln
      5              10              15

Ser Pro Pro Thr Arg Ser Pro Pro Thr Arg Gly Ile Gly Trp Gly His
      20              25              30

Arg Ala Lys Pro Tyr Gln Met Leu Gln Gly Leu Gly Thr Leu Arg Pro
      35              40              45

Leu Arg Pro Gly Val Ser Val Thr Leu Leu Gly Ser Val Cys Leu Gln
      50              55              60

Asp Leu Pro Pro Leu Pro Trp Tyr Arg Arg Lys Val Leu
      65              70              75

```

<210> 749  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 749  
 Met Leu Val His Ile Tyr Ser Cys Cys Gly Met Val Tyr Arg Phe Gly  
                   5                  10                  15  
 Gln Met Ser Asp Asn Pro Phe Tyr Ile Leu Ala Ser Leu Gly Ser Ser  
                   20                  25                  30  
 Ser Cys Arg Asn Gly Leu Ala Ser Lys Trp Arg Gln Ala Asp Pro Ser  
                   35                  40                  45  
 Asp Gly Tyr Met Glu Pro Cys Phe Gln Leu Leu Phe  
                   50                  55                  60

<210> 750  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens

<400> 750  
 Met Cys Leu Cys Ile Pro Leu Gly Gly Tyr Gln Glu Leu Cys His Cys  
                   5                  10                  15  
 Met Ser Thr Ser Asp Gly Phe Ala Pro Pro Pro Gln Leu Gly Ser Arg  
                   20                  25                  30  
 Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro  
                   35                  40                  45  
 Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly  
                   50                  55                  60  
 Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys  
                   65                  70                  75

<210> 751  
 <211> 2479  
 <212> DNA  
 <213> Homo sapiens

<400> 751  
 gtcataattga acatttcaga taactatcat tactogatgc tgttgataac agcaagatgg 60  
 ctttgaaactc agggtcacca caagotattg gaacttacta tgaataccat ggaataccaa 120  
 cggaaaaccc ctatcccgca cagcccaatg tggtaacac tgtctacgag gtgcactcgg 160  
 ctcaagtacta cccgtccccc gtgccccagt accgcccgag ggtccctgagc caggcttcca 240  
 accccgtcgt ctgcacgcag ccaaatccc catccgggac agtgtgcacc tcaaaagcta 300  
 agaaagaaact gtgcatacc ttgacccctg ggaacttcat cgtgggagct ggcgtggcgc 360  
 ctggccctact ctggaagttc atgggcagca agtgtctcaa ctataggata gagtgcgact 420  
 cctcaggtac ctgcataaac cctctaaact ggtgtgatgg cgtgtcaaac tgcctccggc 480  
 gggaggacga gaatcggtgt gtctgcctct accgacaaa ctctactctt cagatgtact 540  
 catctccagag gaagtctcgg caccctgtgt gcccaagacya ctggaacgag aactacgpgc 600

```

ggggggccgt caggggacatg ggctataaag ataattttta ccttagccaa ggaatagtg 660
atagcagggg atocaccagc tttatgaac tgacacacaa tgccgggaat tgcgatatct 720
ataaaaaact gtaccacagt gatgcctgtt cttaaaaaag agtgggtttt ttacgtcgtt 780
tagcctgcgg ggtcaacttg aactcaagcc gccagagcag gatctggggc ggtgagagcg 840
cgctcccggg ggctctggcc tgggnaggtc gcctgcacgt ccagaacgtc caoctgtggc 900
gaggtcccat catcaccccc gagtggatcg tgacagccgc ccactgcgtg gaaaaacctc 960
ttacaacatc atggcatttg acggcatttg cggggatttt gagacaatc ttcatgtttc 1020
atggagccgg atacaagaat caaaaagtga ttctctatcc aaattatgac tccagagcca 1080
agaaasaatga cattgcgctg atgaagctgc agangcctct gactttcaac gaactagtga 1140
aacocagtgt tctgcccac ccaggcatga tgcctgcagc agaacagctc tgcctgattt 1200
ccgggtgggg ggccaccagc gagaaaagga agacccctga agtgcctgac gctgccaagg 1260
tgcttctcat tgagacacag agatgcaaca ccagatatgt ctatgacacac ctgatcacac 1320
cagccatgat ctgtgccggc ttctgcaggg ggaacgttga ttcttgccag ggtgacagtg 1380
gagggcctct ggtcacttgc aacaacasta tctggtggtc gataggggat caaagctggg 1440
gtttctggct tgccaaagct tacagaccag gagtgtacgg gaattgtgat gtattcacgg 1500
actggattta tcgacaatat agggcaaacg gctaatacac atgtttctcg tocttgaagt 1560
cgtttttaca gaaaacaatg gggctggttt tgcttccccc tgcattgatt actcttagag 1620
atgattcaga ggtcacttca tttttattaa scagtgaact tgcctggctt tggcaactct 1680
tgcatcactg tgcaggctgc agtggctccc ctgccagccc tgctctccct aaccctttgt 1740
ccgcaagggg tgatggccgg ctggttgtgg geactggcgg tcaatttgtg aaggagaggg 1800
gttgagaggt gcccccattg agatcttctc gctgagttct ttccaggggc caattttgga 1860
tgagcatgga gctgtcaatt ctacagctgt ggtgacttgc agatgaasaa ggaagagacat 1920
ggaaagggag acagccaggt ggcacccgca ccggctgccc tctggggcca ctgtgtagt 1980
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aaggggaaca gaaacatttt tgttcttatg ggttggaat atagacagtg cocttggctc 2160
gaggaagca atgaaaaag aacttgcctt ggcactcct ggtgcaggtc tccacctgca 2220
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tctagcacc ctggagagtg aatgcccttt ggtccctggc agggcgccaa gtttggcacc 2340
atgtcggcct ctccaggtct gatgtcatt ggaatttgag gtccatgggg gaatatcagg 2400
atgctcagtt taaggtacac tgtttccatg ttatgtttct acacattgat ggtggtgacc 2460
ctgagttcaa agccatttt 2478

```

&lt;210&gt; 752

&lt;211&gt; 492

&lt;212&gt; PRS

&lt;213&gt; Homo sapiens

&lt;400&gt; 752

Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu  
5 10 15

Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Val  
20 25 30

Val Pro Thr Val Tyr Gln Val His Pro Ala Gln Tyr Tyr Pro Ser Pro  
35 40 45

Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val  
50 55 60

Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys  
65 70 75 80

Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val  
85 90 95

Gly Ala Ala Leu Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys

100	105	110
Cys Ser Asn Ser Gly Ile Gln Cys Asp Ser Ser Gly Thr Cys Ile Asn		
115	120	125
Pro Ser Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp		
130	135	140
Glu Asn Arg Cys Val Arg Leu Tyr Gly Pro Asn Phe Ile Leu Gln Met		
145	150	155
Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp		
165	170	175
Asn Glu Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn		
180	185	190
Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser		
195	200	205
Phe Met Lys Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys		
210	215	220
Leu Tyr His Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg		
225	230	235
Cys Leu Ala Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile		
245	250	255
Val Gly Gly Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser		
260	265	270
Leu His Val Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro		
275	280	285
Glu Trp Ile Val Thr Ala Ala His Cys Val Gln Lys Pro Leu Asn Asn		
290	295	300
Pro Trp His Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met		
305	310	315
Phe Tyr Gly Ala Gly Tyr Gln Val Gln Lys Val Ile Ser His Pro Asn		
325	330	335
Tyr Asp Ser Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln		
340	345	350
Lys Pro Leu Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn		
355	360	365
Pro Gly Met Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp		
370	375	380
Gly Ala Thr Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala		
385	390	395
Lys Val Leu Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr		
405	410	415

Asp Asn Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly  
 420 425 430

Asn Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser  
 435 440 445

Asn Asn Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly  
 450 455 460

Cys Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe  
 465 470 475 480

Thr Asp Trp Ile Tyr Arg Gln Met Lys Ala Asn Gly  
 485 490

<210> 753  
 <211> 683  
 <212> DNA  
 <213> Homo sapiens

<400> 753  
 gtcataatga acattccaga taactatcat tactcgatgc tgttgataac agcaagatgg 60  
 ctttgaactc agggtcacca caggctattg gaccttacta tgaaaccat ggataccaa 120  
 cggaaacccc ctatcccgca cagccacatg tggatccac tgtctacgag gtgcattccg 180  
 ctcaagtacta cccgtccccc gtgcaccagt acgccccgag ggtcctgacg caggcttcca 240  
 accccctcgt ctgcacgcag cccaaatccc catccgggac agtgtgacac tcaagagcta 300  
 agaaagcaact gtgcataacc ttgacustgg ggaccttact cgtggagact cgcctggcgg 360  
 ctggcctact ctggaagtgc atgggcaqca agtgcctcaa ctctgggata gactggaact 420  
 cctcaggtac ctgcataacc ccccttaact ggtgtgatgg cgtgtcaaac tgcctccggg 480  
 gggaggagcga gaatcggtgg gttcgctct acggaccaaa ctctcactt cagatgtact 540  
 catctcagag gaagtctctg caccctgtgt gccaaagcga ctggaacgag aactacgggc 600  
 gggcgccctg caggagacatg ggctataaga ataattttta ctctagccaa ggaatagtgg 660  
 atgacggcgg atccaccagg ttt 683

<210> 754  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 754  
 Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu  
 1 5 10 15  
 Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val  
 20 25 30  
 Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro  
 35 40 45  
 Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val  
 50 55 60  
 Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys  
 65 70 75 80  
 Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val  
 85 90 95

Gly Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys  
                   100                  105                  110  
 Cys Ser Asn Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn  
                   115                  120                  125  
 Pro Ser Asn Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp  
                   130                  135                  140  
 Glu Asn Arg Cys Val Arg Leu Tyr Gly Pro Asn Phe Ile Leu Glu Met  
 145                  150                  155                  160  
 Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp  
                   165                  170                  175  
 Asn Glu Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn  
                   180                  185                  190  
 Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser  
                   195                  200                  205  
 Phe

&lt;210&gt; 755

&lt;211&gt; 27

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 755

Val Gly Glu Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly Thr  
   1                  5                  10                  15  
 Glu Ala Arg Arg His Tyr Asp Glu Gly Val Arg  
                   20                  25

&lt;210&gt; 756

&lt;211&gt; 35

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 756

ggatccgcgcg ccacccatgtc actttctagc atgct

35

&lt;210&gt; 757

&lt;211&gt; 27

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer

&lt;400&gt; 757

gtcgactcag ctggaccaca gcgcgcag

27

&lt;210&gt; 758

&lt;211&gt; 34

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PCR primer



<400> 758  
ggatccgcgcg ccaccatggg ctgcaggctg ctct

34

<210> 759  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> PCR primer

<400> 759  
gtcgactcag aaatcctttc ttttgac

27

<210> 760  
<211> 936  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)...(4)  
<223> n = A,T,C or G

<400> 760  
atgggctgca ggotgntctg ctgtggggtt ctctgtctcc tgggagcggt ccccatggaa 60  
acgggagtta cyccagacac aagcacacct gtcatgggaa tgacaaataa gaagtctttg 120  
aaatgtgaac aaactctggg tctaaacgct atgtatttgt acaagcaaaq tgcataaqaq 180  
ccactggagc tcatgtttgt ctacagttct gaagaacggg ttgaataaca cagtgtgcga 240  
agtcgcttct caactgaatg ccccaacagc tctcatttat tcttcaacct acacacctg 300  
cagccagaag actcggcact gtatctctgc gccagcgcc aagaccggac aagcagctcc 360  
tacgagcagt actcgggccc gggcaacagg ctcaaggcca cagaggacct gaaaaacgtg 420  
ttcccacccg aggtcgtgtg gtttgagcca tcagaagcag agatctccca ccccacaaag 480  
gccacactgg tgtgcttgcc caccaggctc tcccccgacc aogtggagct gagctggtgg 540  
gtgaatggga aggaggtgca cagtggggtc agcacagacc cgcagccctt caaggagcag 600  
cccgcctcca atgactccag atackgctg agcagccgac tgagggtctc ggccaccttc 660  
tggcagaacc cccgcaacca ctcccgctgt caagtcagat tctacgggct ctccggagaat 720  
gacgagtgga cccaggataa ggcacacct gtcccccaga tctcagcgc cgaggcctgg 780  
ggtagagcag actgtggtt caactccagc tcttacagc aaggggtctt gtctgcacac 840  
atcctctaig agatcctgt agggaaggcc acctgtatg cctgctggt cagtgcctcc 900  
gtgctgtgg ccagtgtcaa gagaaggat ttctga 936

<210> 761  
<211> 834  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)...(4)  
<223> n = A,T,C or G

<400> 761  
atgtcacttt ctacgctgt naaggtggct acagcttcac tgtggctagg acctgycatt 60  
gcccagaaga taactcaaac ccaaccagga atgttcgtgc aggaagaaga ggtctgtgact 120  
ctgactgca catatgacac cagtgtatca agttatggtc tcttctgta caagcagccc 180

```

agcagtgggg aatgatttt tttattttat caggggtgtt atgacgagca aaatgcaaca 240
gaaggtcgct actcattgaa ttccagaag gaaagaaaat cgcgaacct tgcctctccc 300
gttcccaaac tgggggactc agcaatgtat ttctgtgcaa tgagagaggg cggggggagg 360
ggaaacaac taccctttgg gacaggcact cagctaaaag tggaaactca tctccagaac 420
cctgaccccg ccgtgtacca gctgagagac tctaaatcca gtgacaagtc tgtctgcttc 480
ttcccgatt ttgatttctca sacaaatgtg tcacaaagta aggatttctga tgtgttatct 540
acagacaaaa ctgtgtctaga catgaggtct atggacttca agagcaacag tgcgtgtggc 600
tggagcaaca aatctgactt tgcattgtga aacgccttca acacacagct tattccagaa 660
gacacctttc tcccacgccc agaaagtctc tgtgatgtca agctggtcga gaaaagcttt 720
gaaacagata cgaacctaaa ctttcaaaac ctgtcagtg tgggttcgg aatctctctc 780
ctgaaagtgg ccgggtttta tctgtctatg acgtgcgggc tgggttcag ctga 834

```

&lt;210&gt; 762

&lt;211&gt; 311

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; variant

&lt;222&gt; (1)...(311)

&lt;223&gt; Xaa = Any amino acid

&lt;400&gt; 762

```

Met Gly Cys Arg Leu Xaa Cys Cys Ala Val Leu Cys Leu Leu Gly Ala
      5                      10                      15

```

```

Val Pro Met Glu Thr Gly Val Thr Gln Thr Pro Arg His Leu Val Met
      20                      25                      30

```

```

Gly Met Thr Asn Lys Lys Ser Leu Lys Cys Glu Gln His Leu Gly His
      35                      40                      45

```

```

Asn Ala Met Tyr Trp Tyr Lys Gln Ser Ala Lys Lys Pro Leu Gln Leu
      50                      55                      60

```

```

Met Phe Val Tyr Ser Leu Glu Glu Arg Val Gln Asn Asn Ser Val Pro
      65                      70                      75                      80

```

```

Ser Arg Phe Ser Pro Glu Cys Pro Asn Ser Ser His Leu Phe Leu His
      85                      90                      95

```

```

Leu His Thr Leu Gln Pro Glu Asp Ser Ala Leu Tyr Leu Cys Ala Ser
      100                     105                     110

```

```

Ser Gln Asp Arg Thr Ser Ser Ser Tyr Glu Gln Tyr Phe Gly Pro Gly
      115                     120                     125

```

```

Thr Arg Leu Thr Val Thr Glu Asp Leu Lys Asn Val Phe Pro Pro Glu
      130                     135                     140

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Val Ala Val Phe Glu Pro Ser Glu Ala Glu Ile Ser His Thr Gln Lys
      145                     150                     155                     160

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Ala Thr Leu Val Cys Leu Ala Thr Gly Phe Tyr Pro Asp His Val Glu
      165                     170                     175

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Leu Ser Trp Trp Val Asn Gly Lys Glu Val His Ser Gly Val Ser Thr
      180                     185                     190

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Asp Pro Gln Pro Leu Lys Glu Gln Pro Ala Leu Asn Asp Ser Arg Tyr  
 195 200 205  
 Cys Leu Ser Ser Arg Leu Arg Val Ser Ala Thr Phe Trp Gln Asn Pro  
 210 215 220  
 Arg Asn His Phe Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser Glu Asn  
 225 230 235 240  
 Asp Glu Trp Thr Gln Asp Arg Ala Lys Pro Val Thr Gln Ile Val Ser  
 245 250 255  
 Ala Glu Ala Trp Gly Arg Ala Asp Cys Gly Phe Thr Ser Glu Ser Tyr  
 260 265 270  
 Gln Gln Gly Val Leu Ser Ala Thr Ile Leu Tyr Glu Ile Leu Leu Gly  
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 <213> Homo sapiens  
  
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 Val Gln Glu Lys Glu Ala Val Thr Leu Asp Cys Thr Tyr Asp Thr Ser  
 35 40 45  
 Asp Gln Ser Tyr Gly Leu Phe Trp Tyr Lys Gln Pro Ser Ser Gly Glu  
 50 55 60  
 Met Ile Phe Leu Ile Tyr Gln Gly Ser Tyr Asp Glu Gln Asn Ala Thr  
 65 70 75 80  
 Glu Gly Arg Tyr Ser Leu Asn Phe Gln Lys Ala Arg Lys Ser Ala Asn  
 85 90 95  
 Leu Val Ile Ser Ala Ser Gln Leu Gly Asp Ser Ala Met Tyr Phe Cys  
 100 105 110  
 Ala Met Arg Glu Gly Ala Gly Gly Gly Asn Lys Leu Thr Phe Gly Thr  
 115 120 125  
 Gly Thr Gln Leu Lys Val Glu Leu Asn Ile Gln Asn Pro Asp Pro Ala  
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## 301

Val Tyr Gln Leu Arg Asp Ser Lys Ser Ser Asp Lys Ser Val Cys Leu  
145 150 155 160

Phe Thr Asp Phe Asp Ser Gln Thr Asn Val Ser Gln Ser Lys Asp Ser  
165 170 175

Asp Val Tyr Ile Thr Asp Lys Thr Val Leu Asp Met Arg Ser Met Asp  
180 185 190

Phe Lys Ser Asn Ser Ala Val Ala Trp Ser Asn Lys Ser Asp Phe Ala  
195 200 205

Cys Ala Asn Ala Phe Asn Asn Ser Ile Ile Pro Glu Asp Thr Phe Phe  
210 215 220

Pro Ser Pro Glu Ser Ser Cys Asp Val Lys Leu Val Glu Lys Ser Phe  
225 230 235 240

Glu Thr Asp Thr Asn Leu Asn Phe Gln Asn Leu Ser Val Ile Gly Phe  
245 250 255

Arg Ile Leu Leu Leu Lys Val Ala Gly Phe Asn Leu Leu Met Thr Leu  
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Arg Leu Trp Ser Ser  
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<210> 764

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 764

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atgtttcagc acctgatgca gaagcggaaag cacacccagt ggacgtatgg accactgacc 180  
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<212> DNA  
<213> Homo sapiens

<400> 765  
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atgtttcagc acctgatgca gaagcggag caccaccagt ggacgtatgg accactgacc 180  
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ctggaggacy gggagagctg ggaatatcag atc 1533

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<211> 511  
<212> PRT  
<213> Homo sapiens

<400> 766  
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Ala Gly Val Glu Gly Asn Thr Val Met Phe Gln His Leu Met Gln Lys  
35 40 45  
Arg Lys His Thr Gln Trp Thr Tyr Gly Pro Leu Thr Ser Thr Leu Tyr  
50 55 60  
Asp Leu Thr Glu Ile Asp Ser Ser Gly Asp Glu Gln Ser Leu Leu Glu  
65 70 75 80

Leu Ile Ile Thr Thr Lys Lys Arg Glu Ala Arg Gln Ile Leu Asp Gln  
 85 90 95  
 Thr Pro Val Lys Glu Leu Val Ser Leu Lys Trp Lys Arg Tyr Gly Arg  
 100 105 110  
 Pro Tyr Phe Cys Met Leu Gly Ala Ile Tyr Leu Leu Tyr Ile Ile Cys  
 115 120 125  
 Phe Thr Met Cys Cys Ile Tyr Arg Pro Leu Lys Pro Arg Thr Asn Asn  
 130 135 140  
 Arg Thr Ser Pro Arg Asp Asn Thr Leu Leu Gln Glu Lys Leu Leu Gln  
 145 150 155 160  
 Glu Ala Tyr Met Thr Pro Lys Asp Asp Ile Arg Leu Val Gly Glu Leu  
 165 170 175  
 Val Thr Val Ile Gly Ala Ile Ile Ile Leu Leu Val Glu Val Pro Asp  
 180 185 190  
 Ile Phe Arg Met Gly Val Thr Arg Phe Phe Gly Gln Thr Ile Leu Gly  
 195 200 205  
 Gly Pro Phe His Val Leu Ile Ile Thr Tyr Ala Phe Met Val Leu Val  
 210 215 220  
 Thr Met Val Met Arg Leu Ile Ser Ala Ser Gly Glu Val Val Pro Met  
 225 230 235 240  
 Ser Phe Ala Leu Val Leu Gly Trp Cys Asn Val Met Tyr Phe Ala Arg  
 245 250 255  
 Gly Phe Gln Met Leu Gly Pro Phe Thr Ile Met Ile Gln Lys Met Ile  
 260 265 270  
 Phe Gly Asp Leu Met Arg Phe Cys Trp Leu Met Ala Val Val Ile Leu  
 275 280 285  
 Gly Phe Ala Ser Ala Phe Tyr Ile Ile Phe Gln Thr Glu Asp Pro Glu  
 290 295 300  
 Glu Leu Gly His Phe Tyr Asp Tyr Pro Met Ala Leu Phe Ser Thr Phe  
 305 310 315 320  
 Glu Leu Phe Leu Thr Ile Ile Asp Gly Pro Ala Asn Tyr Asn Val Asp  
 325 330 335  
 Leu Pro Phe Met Tyr Ser Ile Thr Tyr Ala Ala Phe Ala Ile Ile Ala  
 340 345 350  
 Thr Leu Leu Met Leu Asn Leu Leu Ile Ala Met Met Gly Asp Thr His  
 355 360 365  
 Trp Arg Val Ala His Gln Arg Asp Glu Leu Trp Arg Ala Gln Ile Val  
 370 375 380  
 Ala Thr Thr Val Met Leu Glu Arg Lys Leu Pro Arg Cys Leu Trp Pro

385	390	395	400
Arg Ser Gly Ile Cys Gly Arg Glu Tyr Gly Leu Gly Asp Arg Trp Phe			
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Leu Arg Val Glu Asp Arg Gln Asp Leu Asn Arg Gln Arg Ile Gln Arg			
420	425		430
Tyr Ala Gln Ala Phe His Thr Arg Gly Ser Glu Asp Leu Asp Lys Asp			
435	440	445	
Ser Val Glu Lys Leu Glu Leu Gly Cys Pro Phe Ser Pro His Leu Ser			
450	455	460	
Leu Pro Met Pro Ser Val Ser Arg Ser Thr Ser Arg Ser Ser Ala Asn			
465	470	475	480
Trp Glu Arg Leu Arg Gln Gly Thr Leu Arg Arg Asp Leu Arg Gly Ile			
485	490		495
Ile Asn Arg Gly Leu Glu Asp Gly Glu Ser Trp Glu Tyr Gln Ile			
500	505		510

&lt;210&gt; 767

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 767

Met Tyr Asn Leu Leu Ser Tyr Asp Arg His Gly Asp His Leu Gln		
5	10	15
Pro Leu Asp Leu Val Pro Asn His Gln Gly Leu Thr Pro Phe Lys Leu		
20	25	30
Ala Gly Val Glu Gly Asn Thr Val Met Phe Gln His Leu Met Gln Lys		
35	40	45
Arg Lys His Thr Gln Trp Thr Tyr Gly Pro Leu Thr Ser Thr Leu Tyr		
50	55	60
Asp Leu Thr Glu Ile Asp Ser Ser Gly Asp Glu Gln Ser Leu Leu Glu		
65	70	75
Leu Ile Ile Thr Thr Lys Lys Arg Glu Ala Arg Gln Ile Leu Asp Gln		
85	90	95
Thr Pro Val Lys Glu Leu Val Ser Leu Lys Trp Lys Arg Tyr Gly Arg		
100	105	110
Pro Tyr Phe Cys Met Leu Gly Ala Ile Tyr Leu Leu Tyr Ile Ile Cys		
115	120	125
Phe Thr Met Cys Cys Ile		
130		

&lt;210&gt; 768

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 768

Ala Tyr Arg Pro Leu Lys Pro Arg Thr Asn Asn Arg Thr Ser Pro Arg  
                                   5                                  10                                  15

Asp Asn Thr Leu Leu Gln Gln Lys Leu Leu Gln Glu Ala Tyr Met Thr  
                                   20                                  25                                  30

Pro Lys Asp Asp Ile Arg Leu Val Gly Glu Leu Val Thr Val Ile Gly  
                                   35                                  40                                  45

Ala Ile Ile Ile Leu Leu Val  
                                   50                                  55

&lt;210&gt; 769

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 769

Glu Val Pro Asp Ile Phe Arg Met Gly Val Thr Arg Phe Phe Gly Gln  
                                   5                                  10                                  15

Thr Ile Leu Gly Gly Pro Phe His Val Leu Ile Ile Thr Tyr Ala Phe  
                                   20                                  25                                  30

Met Val Leu Val Thr Met Val  
                                   35

&lt;210&gt; 770

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 770

Met Arg Leu Ile Ser Ala Ser Gly Glu Val Val Pro Met Ser Phe Ala  
                                   5                                  10                                  15

Leu Val Leu

&lt;210&gt; 771

&lt;211&gt; 52

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 771

Gly Trp Cys Asn Val Met Tyr Phe Ala Arg Gly Phe Gln Met Leu Gly  
                                   5                                  10                                  15

Pro Phe Thr Ile Met Ile Gln Lys Met Ile Phe Gly Asp Leu Met Arg



20	25	30
Phe Cys Trp Leu Met Ala Val Val Ile Leu Gly Phe Ala Ser Ala Phe		
35	40	45
Tyr Ile Ile Phe		
50		
<210> 772		
<211> 213		
<212> PRT		
<213> Homo sapiens		
<400> 772		
Gln Thr Glu Asp Pro Glu Glu Leu Gly His Phe Tyr Asp Tyr Pro Met		
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Ala Leu Phe Ser Thr Phe Glu Leu Phe Leu Thr Ile Ile Asp Gly Pro		
20	25	30
Ala Asn Tyr Asn Val Asp Leu Pro Phe Met Tyr Ser Ile Thr Tyr Ala		
35	40	45
Ala Phe Ala Ile Ile Ala Thr Leu Leu Met Leu Asn Leu Leu Ile Ala		
50	55	60
Met Met Gly Asp Thr His Trp Arg Val Ala His Glu Arg Asp Glu Leu		
65	70	75
Trp Arg Ala Gln Ile Val Ala Thr Thr Val Met Leu Glu Arg Lys Leu		
85	90	95
Pro Arg Cys Leu Trp Pro Arg Ser Gly Ile Cys Gly Arg Glu Tyr Gly		
100	105	110
Leu Gly Asp Arg Trp Phe Leu Arg Val Glu Asp Arg Gln Asp Leu Asn		
115	120	125
Arg Gln Arg Ile Gln Arg Tyr Ala Gln Ala Phe His Thr Arg Gly Ser		
130	135	140
Glu Asp Leu Asp Lys Asp Ser Val Glu Lys Leu Glu Leu Gly Cys Pro		
145	150	155
Phe Ser Pro His Leu Ser Leu Pro Met Pro Ser Val Ser Arg Ser Thr		
165	170	175
Ser Arg Ser Ser Ala Asn Trp Glu Arg Leu Arg Gln Gly Thr Leu Arg		
180	185	190
Arg Asp Leu Arg Gly Ile Ile Asn Arg Gly Leu Glu Asp Gly Glu Ser		
195	200	205
Trp Glu Tyr Gln Ile		
210		

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 <211> 1302  
 <212> DNA  
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<210> 774  
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 <212> DNA  
 <213> Homo sapiens

<400> 774  
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<210> 775

<211> 957

<212> DNA

<213> Homo sapiens

<400> 775

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gctgtgctag gtaacttgac aatcatctac attgtgcgga ctgagccag cctgcatgag 180  
cccatgtata tattttcttg catgctttca ggcattgaca tctcatctc cactcatcc 240  
atgcccaaaa tgcctggccat cttctggttc aattccacta ccatccagtt tgatgctgtg 300  
ctgctacaga tgtttgcaat ccaactctta tctggcatgg aatccacagt gctgtgccc 360  
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attgacagc gcatccttcg acttttccat gtggccaac accgttcaag gccctag 957

<210> 776

<211> 954

<212> DNA

<213> Homo sapiens

<400> 776

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gctgtgctag gtaacttgac aatcatctac attgtgcgga ctgagccag cctgcatgag 180  
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&lt;210&gt; 777

52117 338

&lt;212&gt; 2132

<213> Homo sapiens

&lt;400&gt; 377

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20 25 30

Pro Leu Cys Ser Leu Tyr Leu Ile Ala Val Leu Gly Asn Leu Thr Ile  
35 40 45

Ile Tyr Ile Val Arg Thr Glu His Ser Leu His Glu Pro Met Tyr Ile  
50 55 60

Phe Leu Cys Met Leu Ser Gly Ile Asp Ile Leu Ile Ser Thr Ser Ser  
 63 70 75 80

Met Pro Lys Met Leu Ala Ile Phe Trp Phe Asn Ser Thr Thr Ile Glu  
85 90 95

Phe Asp Ala Cys Leu Leu Gln Met Phe Ala Ile His Ser Leu Ser Gly  
100 105 110

Met Glu Ser Thr Val Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala  
115 120 125

Ile Cys His Pro Leu Arg His Ala Thr Val Leu Thr Leu Pro Arg Val  
130 135 140

Thr Lys Ile Gly Val Ala Ala Val Val Arg Gly Ala Ala Leu Met Ala  
145 150 155 160

Pro Leu Pro Val Phe Ile Lys Gln Leu Pro Phe Cys Arg Ser Asn Ile  
165 170 175

Leu Ser His Ser Tyr Cys Leu His Gln Asp Val Met Lys Leu Ala Cys  
180 185 190

Asp Asp Ile Arg Val Asn Val Val Tyr Gly Leu Ile Val Ile Ile Ser  
195 200 205

Ala Ile Gly Leu Asp Ser Leu Leu Ile Ser Phe Ser Tyr Leu Leu Ile  
210 215 220

Leu Lys Thr Val Leu Gly Leu Thr Arg Glu Ala Gln Ala Lys Ala Phe  
225 230 235 240

Gly Thr Cys Val Ser His Val Cys Ala Val Phe Ile Phe Tyr Val Pro  
245 250 255

Phe Ile Gly Leu Ser Met Val His Arg Phe Ser Lys Arg Arg Asp Ser  
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Pro Leu Pro Val Ile Leu Ala Asn Ile Tyr Leu Leu Val Pro Pro Val  
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Leu Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Glu Ile Arg Gln Arg  
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Ile Leu Arg Leu Phe His Val Ala Thr His Ala Ser Glu Pro  
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<210> 778

<211> 28

<212> PRT

<213> Homo sapiens

<400> 778

Met Met Val Asp Pro Asn Gly Asn Glu Ser Ser Ala Thr Tyr Phe Ile  
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Leu Ile Gly Leu Pro Gly Leu Glu Glu Ala Gln Phe  
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<210> 779

<211> 9

<212> PRT

<213> Homo sapiens

<400> 779

Arg Thr Glu His Ser Leu His Glu Pro  
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<210> 780

<211> 21

<212> PRT

<213> Homo sapiens

<400> 780

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Ala Cys Leu Leu Gln  
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<210> 781

<211> 20

<212> PRT

<213> Homo sapiens

<400> 781

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<210> 782  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 782  
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Tyr Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Asp Asp Ile Arg  
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Val Asn Val Val Tyr  
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<210> 783  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 783  
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<210> 784  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 784  
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<210> 785  
<211> 22  
<212> PRT  
<213> Homo sapiens

<400> 785  
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Thr His Ala Ser Glu Pro  
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<210> 786  
<211> 3245  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 786

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<210> 787  
 <211> 1479  
 <212> DNA  
 <213> Homo sapiens

<400> 787

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<210> 788  
 <211> 1476  
 <212> DNA  
 <213> Homo sapiens

<400> 788

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1476

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&lt;210&gt; 789

&lt;211&gt; 492

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 789

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Asn His Gly Tyr Gln Pro Gln Asn Pro Tyr Pro Ala Gln Pro Thr Val
      20      25      30
Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro
      35      40      45
Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val
      50      55      60
Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys
      65      70      75      80
Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val
      85      90      95
Gly Ala Ala Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys
      100      105      110
Cys Ser Asn Ser Gly Ile Glu Cys Asp Ser Ser Gly Thr Cys Ile Asn
      115      120      125
Pro Ser Asp Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp
      130      135      140
Glu Asn Arg Cys Val Arg Leu Tyr Gly Ser Asn Phe Ile Leu Gln Val
      145      150      155      160
Tyr Ser Ser Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp
      165      170      175
Asn Glu Asn Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn
      180      185      190
Asn Phe Tyr Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser
      195      200      205
Phe Met Lys Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys
      210      215      220
Leu Tyr His Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg
      225      230      235      240
Cys Ile Ala Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile
      245      250      255
Val Gly Gly Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser
      260      265      270
Leu His Val Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro
      275      280      285
Gln Trp Ile Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn
      290      295      300
Pro Trp His Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met
      305      310      315      320
Phe Tyr Gly Ala Gly Tyr Gln Val Glu Lys Val Ile Ser His Pro Asn
      325      330      335
Tyr Asp Ser Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln
      340      345      350

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Lys Pro Leu Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn  
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 Pro Gly Met Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp  
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 Gly Ala Thr Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala  
 385 390 395 400  
 Lys Val Leu Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr  
 405 410 415  
 Asp Asn Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly  
 420 425 430  
 Asn Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser  
 435 440 445  
 Lys Asn Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly  
 450 455 460  
 Cys Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe  
 465 470 475 480  
 Thr Asp Trp Ile Tyr Arg Gln Met Arg Ala Asp Gly  
 485 490

&lt;210&gt; 790

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 790

Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr Glu  
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 Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro Thr Val  
 20 25 30  
 Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr Pro Ser Pro  
 35 40 45  
 Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala Ser Asn Pro Val  
 50 55 60  
 Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr Val Cys Thr Ser Lys  
 65 70 75 80  
 Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr Leu Gly Thr Phe Leu Val  
 85 90 95  
 Gly Ala Ala Leu  
 100

&lt;210&gt; 791

&lt;211&gt; 393

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 791

Leu Ala Ala Gly Leu Leu Trp Lys Phe Met Gly Ser Lys Cys Ser Asn  
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 Ser Gly Ile Gln Cys Asp Ser Ser Gly Thr Cys Ile Asn Pro Ser Asn  
 20 25 30  
 Trp Cys Asp Gly Val Ser His Cys Pro Gly Gly Glu Asp Glu Asn Arg  
 35 40 45  
 Cys Val Arg Leu Tyr Gly Ser Asn Phe Ile Leu Gln Val Tyr Ser Ser  
 50 55 60  
 Gln Arg Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp Asn Glu Asn  
 65 70 75 80

Tyr Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn Asn Phe Tyr  
 85 90 95  
 Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser Phe Met Lys  
 100 105 110  
 Leu Asn Thr Ser Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys Leu Tyr His  
 115 120 125  
 Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg Cys Ile Ala  
 130 135 140  
 Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg Ile Val Gly Gly  
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 Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln Val Ser Leu His Val  
 165 170 175  
 Gln Asn Val His Val Cys Gly Gly Ser Ile Ile Thr Pro Glu Trp Ile  
 180 185 190  
 Val Thr Ala Ala His Cys Val Glu Lys Pro Leu Asn Asn Pro Trp His  
 195 200 205  
 Trp Thr Ala Phe Ala Gly Ile Leu Arg Gln Ser Phe Met Phe Tyr Gly  
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 Ala Gly Tyr Gln Val Glu Lys Val Ile Ser His Pro Asn Tyr Asp Ser  
 225 230 235 240  
 Lys Thr Lys Asn Asn Asp Ile Ala Leu Met Lys Leu Gln Lys Pro Leu  
 245 250 255  
 Thr Phe Asn Asp Leu Val Lys Pro Val Cys Leu Pro Asn Pro Gly Met  
 260 265 270  
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 Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser Lys Asn Asn  
 340 345 350  
 Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly Cys Ala Lys  
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 Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe Thr Asp Trp  
 370 375 380  
 Ile Tyr Arg Gln Met Arg Ala Asp Gly  
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&lt;210&gt; 792

&lt;211&gt; 595

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 792

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 Pro Ala Glu Ala Val Ile Gly Tyr Ser Asp Leu Glu Gly Asp Phe Asp  
 35 40 45  
 Val Ala Val Leu Pro Phe Ser Asn Ser Thr Asn Asn Gly Leu Leu Phe  
 50 55 60  
 Ile Asn Thr Thr Ile Ala Ser Ile Ala Ala Lys Glu Gln Gly Val Ser  
 65 70 75 80

Leu	Glu	Lys	Arg	Glu	Ala	Glu	Ala	Met	Val	Leu	Gly	Ile	Gly	Pro	Val		
				85					90					95			
Leu	Gly	Leu	Val	Cys	Val	Pro	Leu	Leu	Gly	Ser	Ala	Ser	Asp	His	Trp		
				100					105					110			
Arg	Gly	Arg	Tyr	Gly	Arg	Arg	Arg	Arg	Pro	Phe	Ile	Trp	Ala	Leu	Ser	Leu	
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				145			150				155				160		
Leu	Gly	Val	Gly	Leu	Leu	Asp	Phe	Cys	Gly	Gln	Val	Cys	Phe	Thr	Pro		
				165				170						175			
Leu	Glu	Ala	Leu	Leu	Ser	Asp	Leu	Phe	Arg	Asp	Pro	Asp	His	Cys	Arg		
				180				185						190			
Gln	Ala	Tyr	Ser	Val	Tyr	Ala	Phe	Met	Ile	Ser	Leu	Gly	Gly	Cys	Leu		
				195				200					205				
Gly	Tyr	Leu	Leu	Pro	Ala	Ile	Asp	Trp	Asp	Thr	Ser	Ala	Leu	Ala	Pro		
				210			215					220					
Tyr	Leu	Gly	Thr	Gln	Glu	Glu	Cys	Leu	Phe	Gly	Leu	Leu	Thr	Leu	Ile		
				225			230				235				240		
Phe	Leu	Thr	Cys	Val	Ala	Ala	Thr	Leu	Leu	Val	Ala	Glu	Glu	Ala	Ala		
				245					250					255			
Leu	Gly	Pro	Thr	Glu	Pro	Ala	Glu	Gly	Leu	Ser	Ala	Pro	Ser	Leu	Ser		
				260				265						270			
Pro	His	Cys	Cys	Pro	Cys	Arg	Ala	Arg	Leu	Ala	Phe	Arg	Asn	Leu	Gly		
				275				280						285			
Ala	Leu	Leu	Pro	Arg	Leu	His	Gln	Leu	Cys	Cys	Arg	Met	Pro	Arg	Thr		
				290			295					300					
Leu	Arg	Arg	Leu	Phe	Val	Ala	Glu	Leu	Cys	Ser	Trp	Met	Ala	Leu	Met		
				305			310				315				320		
Thr	Phe	Thr	Leu	Phe	Tyr	Thr	Asp	Phe	Val	Gly	Glu	Gly	Leu	Tyr	Gln		
				325					330						335		
Gly	Val	Pro	Arg	Ala	Glu	Pro	Gly	Thr	Glu	Ala	Arg	Arg	His	Tyr	Asp		
				340				345						350			
Glu	Gly	Val	Arg	Met	Gly	Ser	Leu	Gly	Leu	Phe	Leu	Gln	Cys	Ala	Ile		
				355				360						365			
Ser	Leu	Val	Phe	Ser	Leu	Val	Met	Asp	Arg	Leu	Val	Gln	Arg	Phe	Gly		
				370			375							380			
Thr	Arg	Ala	Val	Tyr	Leu	Ala	Ser	Val	Ala	Ala	Phe	Pro	Val	Ala	Ala		
				385			390				395				400		
Gly	Ala	Thr	Cys	Leu	Ser	His	Ser	Val	Ala	Val	Val	Thr	Ala	Ser	Ala		
				405					410					415			
Ala	Leu	Thr	Gly	Phe	Thr	Phe	Ser	Ala	Leu	Gln	Ile	Leu	Pro	Tyr	Thr		
				420				425						430			
Leu	Ala	Ser	Leu	Tyr	His	Arg	Glu	Lys	Gln	Val	Phe	Leu	Pro	Lys	Tyr		
				435				440						445			
Arg	Gly	Asp	Thr	Gly	Gly	Ala	Ser	Ser	Glu	Asp	Ser	Leu	Met	Thr	Ser		
				450				455				460					
Phe	Leu	Pro	Gly	Pro	Lys	Pro	Gly	Ala	Pro	Phe	Pro	Asn	Gly	His	Val		
				465			470				475				480		
Gly	Ala	Gly	Gly	Ser	Gly	Leu	Leu	Pro	Pro	Pro	Pro	Ala	Leu	Cys	Gly		
				485					490					495			
Ala	Ser	Ala	Cys	Asp	Val	Ser	Val	Arg	Val	Val	Val	Gly	Glu	Pro	Thr		
				500				505						510			
Glu	Ala	Arg	Val	Val	Pro	Gly	Arg	Gly	Ile	Cys	Leu	Asp	Leu	Ala	Ile		
				515				520						525			
Leu	Asp	Ser	Ala	Phe	Leu	Leu	Ser	Gln	Val	Ala	Pro	Ser	Leu	Phe	Met		
				530			535							540			

Gly Ser Ile Val Gln Leu Ser Gln Ser Val Thr Ala Tyr Met Val Ser  
545 550 555 560  
Ala Ala Gly Leu Gly Leu Val Ala Ile Tyr Phe Ala Thr Gln Val Val  
565 570 575  
Phe Asp Lys Ser Asp Leu Ala Lys Tyr Ser Ala Gly Gly His His His  
580 585 590  
His His His  
595

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